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09/765,108	01/16/2001	Alexander Mcdvinsky	018926006400	8249
43471 7590 02/16/2007 GENERAL INSTRUMENT CORPORATION DBA THE CONNECTED HOME SOLUTIONS BUSINESS OF MOTOROLA, INC. 101 TOURNAMENT DRIVE HORSHAM, PA 19044			EXAMINER COLIN, CARL G	
			ART UNIT 2136	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/765,108	<b>Applicant(s)</b> MEDVINSKY, ALEXANDER	
	<b>Examiner</b> Carl Colin	<b>Art Unit</b> 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 10-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Declaration filed on January 25, 2007 under 37 CFR 1.131 is sufficient to overcome the Klingler reference.

1.1 The Declaration filed on January 25, 2007 under 37 CFR 1.131 has been considered but is ineffective to overcome the Crichton reference.

The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Crichton reference as the date shown in the invention record form is September 12, 2000. In addition, the content does not provide any disclosure of gateway controller. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). In addition, it is also noted that Applicant's Declaration only shows proof of generating a new set of keys by incrementing N when the codec changes. In response to Applicant's statement that the citations that Examiner relies on Crichton reference in the rejection of the claims are not supported in the provisional, Examiner respectfully asserts that, as cited, the background of the US publication reference is similar to the background of the provisional application, which ends on page 8; and paragraphs 42 and 47 of the US publication reference are similar to paragraphs 1-2 of page 13 of the provisional application. Therefore,

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Applicant's statement is not correct, the declaration submitted does not antedate the reference, and the provisional reference of Crichton is still applicable as prior art.

Applicant's request for reconsideration of the finality of the rejection of the last Office action has been considered and since the Declaration has overcome Klingler reference, the finality of that action is withdrawn.

***Response to Arguments***

2. In response to the After-Final amendment and Declaration filed on January 25, 2007, claims 1-7 and 10-23 are presented for examination. The other prior art with the exception of Klingler has not been overcome. Upon further reconsideration, a new ground of rejection is set forth below.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3, 6-7, 10-16, and 19-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,940,508 to **Long et al** in view of US Patent 5,081,679 to **Dent**.

As per claim 1, **Long et al** substantially discloses a system for securely transmitting Real Time Protocol voice packets during a communication session with a remote multimedia terminal adapter over an Internet protocol network; the system comprising: **Long et al** discloses a crypto equipment 10 for receiving the voice packets (see column 2, lines 4-6) the voice packets having a clock counter to synchronize cryptographic operations between encryption equipments 10 and 20 (column 3, lines 19-23) that meets the recitation of *a local multimedia terminal adapter* (crypto equipment 10) *receiving the voice packets having a timestamp* (Clk Counter 30) *as a synchronization source to synchronize cryptographic operations between said local multimedia terminal adapter* (crypto equipment 10) *and said remote multimedia terminal adapter* (crypto equipment 20), *the local multimedia terminal adapter* (crypto equipment 10) *comprising, a local key stream generator* (key generator 80) *for generating a first key stream*; **Long et al** discloses an encryptor equipment is operable to encrypt the data using key generated by the key generator (see column 2, lines 4-6; column 2, lines 16-21 and fig.2; see also column 4, lines 53-56) that meets the recitation of *a packet encryptor that encrypts the voice packets using at least a portion of the first key stream to form encrypted voice packets*. **Long et al** discloses equipments 10 and 20 are similar and for simplicity only one direction will be discussed (i.e. the approach for decryption and equipment 20 is implicit or inherent) and further discloses *the remote multimedia terminal adapter* (equipment 20) *receiving the encrypted voice packets* (see column 2, lines 6-15 and fig. 2), *the remote multimedia terminal adapter further comprising a remote key stream*

*generator (key generator 80) for generating the first key stream in order to decrypt the encrypted voice packets (see column 1, lines 16-18 and column 2, lines 6-8); decryptor equipment is operable to decrypt the data using key generated (see column 2, lines 6-8; column 2, lines 16-21 and fig. 2; see also column 4, lines 53-56) that meets the recitation of a packet decryptor decrypting the encrypted voice packets using the first key stream. Long et al* discloses a rekeying process wherein both key generators generate a second key when equipment 10 performs a switchover during the communication session and both equipments 10 and 20 use the second key stream (see column 2, lines 47-63 and column 4, lines 12-23) that meets the recitation of *wherein both key stream generators are capable of generating a second key stream when a component used to transmit the Real Time Protocol voice packets changes during the communication session and the packet encryptor and packet decryptor use the second key stream. Long et al* is silent about the data being voice data. It is apparent one of ordinary skill in the art that the invention may be applied to any type of data communication as known in the art including radio communication using voice packets. **Dent** in an analogous art also discloses synchronization using real-time clock and counters operable to synchronize cryptographic operations between a transmitter and a receiver in cellular radio system using voice packets (see column 12, lines 23-51). The equipment may be used for secure communication over digital channel for converting a voice signal into digital signal (see column 8, lines 54-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system of **Long et al** into cellular radio communications so as to securely transmit voice packets using synchronization technique and convert voice packet to digital data stream and vice versa as suggested by **Dent** above.

**As per claim 2**, the references as combined above disclose the limitation of wherein the second key stream is generated when the system switches from a first to a second coder/decoder for compression/decompression of the voice packets, for example (see **Long et al**, column 4, lines 5-35; column 2, lines 47-63).

**As per claim 3**, the references as combined above disclose the limitation of wherein the second key stream is generated when a Message Authentication Code algorithm change occurs, for example (see **Long et al**, column 3, lines 19-23) (see also **Dent**, column 10, lines 14-25).

**As per claim 6**, **Long et al** substantially discloses a system for communicating Real Time Protocol voice packets between a local and a remote location over an Internet protocol network, the system comprising: *a stream cipher module (10) for encrypting the voice packets*, for example (see column 2, lines 4-6); and *a key stream generator (key generator 80) for generating a first Real Time Protocol key stream* (see column 4, lines 53-56), *the stream cipher module employing the first key stream to encrypt the voice packets for forwarding to the remote location*, (see column 2, lines 4-8; column 2, lines 16-21 and fig.2; see also column 4, lines 53-56). **Long et al** discloses a rekeying process wherein the key generator in equipment 10 generates a second key for encrypting the voice packets when performs a switchover from a first key variable to a second key variable each key variable being involved in the synchronization process of the key (see column 4, lines 5-35; column 2, lines 47-63) that meets the recitation of *the key stream generator producing a second Real Time Protocol key stream for encrypting the*

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*voice packets when the system switches from a first communication parameter to a second communication parameter, each of the first and second parameters being involved in the synchronization of the key stream*, **Long et al** also discloses the voice packets having a clock counter to synchronize cryptographic operations between encryption equipments 10 and 20 (column 3, lines 19-23) that meets the recitation of *wherein the voice packets having a timestamp as a synchronization source operable to synchronize cryptographic operations between said local and remote locations*. **Long et al** is silent about the data being voice data. It is apparent one of ordinary skill in the art that the invention may be applied to any type of data communication as known in the art including radio communication using voice packets. **Dent** in an analogous art also discloses using real-time clock and counters operable to synchronize cryptographic operations between a transmitter and a receiver in cellular radio system using voice packets (see column 12, lines 23-51). The equipment may be used for secure communication over digital channel for converting a voice signal into digital signal (see column 8, lines 54-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system of **Long et al** into cellular radio communications so as to securely transmit voice packets using synchronization technique and convert voice packet to digital data stream and vice versa as suggested by **Dent** above.

**As per claim 7**, the references as combined above disclose the limitation of wherein the first communication parameter is a first coder/decoder that compresses/decompresses the voice packets, and the second communication parameter is a second coder/decoder that compresses/decompresses the voice packets, for example (see **Dent**, column 10, line 56 through



column 11, line 19). **Dent** discloses coder/decoder for converting voice packets from analog to digital and digital to analog (see also column 8, lines 54-66). Therefore, claim 7 is rejected on the same rationale as the rejection of claim 6.

As per claim 10, the references as combined above disclose the limitation of further comprising a new time stamp sequence generated when the second Real Time Protocol key stream is generated, for example (see **Long et al**, column 3, lines 12-18 and column 4, lines 25-29).

As per claim 11, **Long et al** discloses the limitation of providing key derivation or a pseudorandom function based on a counter, a known value, and key variable, for example (see column 3, lines 5-23) that meets the recitation of wherein the second key stream is generated by re-executing the following key derivation function:  $F(S, \text{"End-End RTP Key Change } \langle N \rangle \text{"})$  where  $N$  is a counter incremented whenever a new set of Real Time Protocol keys is re-derived for the same media stream session;  $F()$  is a one-way pseudo-random function used for the purpose of key derivation;  $S$  is a shared secret - a random value shared between the two endpoints and is known only to those two endpoints or a trusted server, and "End-End RTP Key Change  $\langle N \rangle$ " is a label that is used as a parameter to the key derivation function  $F()$ ,  $\langle N \rangle$  stands for an ASCII representation of a decimal number, representing a counter. Similar algorithm in the claimed invention of  $f$  as a function of a secret key and a parameter can be found in cryptography textbook known in the art. (See also **Dent**, column 15, lines 20-50).

**Claim 12** is similar to the rejected **claim 11** except for adding a synchronization source identifier, which is known in the art as found in US patents 6,2754,71 and 6,122,665. **Long et al** also uses a key identifier that meets the recitation of synchronization source identifier, for example (see **Long et al**, column 3, lines 5-23). Therefore, **claim 12** is rejected on the same rationale as the rejection as the rejection of **claim 11**.

As per **claim 13**, **Long et al** substantially discloses a method for securely transmitting Real Time Protocol voice packets from a local to a remote location via a communication network, the method comprising: *generating a first Real Time Protocol key stream for encrypting the voice packets* (see column 4, lines 53-56), *forwarding encrypted voice packets to the remote location* (see column 2, lines 4-8; column 2, lines 16-21 and fig.2; see also column 4, lines 53-56). **Long et al** discloses a rekeying process wherein the key generator in equipment 10 generates a second key for encrypting the voice packets in response to reach a switchover value which causes a key update for the same media stream during a communication session or in response to any loss of data synchronization or need to provide data re-synchronization (see column 4, lines 5-35; column 2, lines 47-56; and column 2, line 63 through column 3, line 5) that meets the recitation of *generating a second Real Time Protocol key stream for encrypting the voice packets in response to a request to change communication parameters for the same media stream during a communication session*; **Long et al** further discloses *forwarding voice packets encrypted with the second Real Time Protocol key stream to the remote location* (see column 3, lines 19-24 and column 4, lines 47-49); **Long et al** also discloses the voice packets having a clock counter to synchronize cryptographic operations between encryption equipments 10 and 20

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(column 3, lines 19-23) that meets the recitation of *wherein the voice packets having a timestamp as a synchronization source operable to synchronize cryptographic operations between said local and remote locations*. **Long et al** is silent about the data being voice data. It is apparent one of ordinary skill in the art that the invention may be applied to any type of data communication as known in the art including radio communication using voice packets. **Dent** in an analogous art also discloses synchronization using real-time clock and counters operable to synchronize cryptographic operations between a transmitter and a receiver in cellular radio system using voice packets (see column 12, lines 23-51). The equipment may be used for secure communication over digital channel for converting a voice signal into digital signal (see column 8, lines 54-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system of **Long et al** into cellular radio communications so as to securely transmit voice packets using synchronization technique and convert voice packet to digital data stream and vice versa as suggested by **Dent** above.

As per claim 14, the references as combined above disclose the limitation of further comprising reinitializing a time stamp for synchronizing decryption of the voice packets, for example (see **Dent**, column 15, lines 20-44 and column 12, lines 23-51). Therefore, claim 14 is rejected on the same rationale as the rejection of claim 13.

As per claim 15, the references as combined above disclose the claimed method of claim 13. **Long et al** further discloses the limitation of providing key derivation or a pseudorandom function based on a counter, a known value, and key variable, for example (see column 3, lines

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5-23) that meets the recitation of wherein the second key stream is generated by re-executing the following key derivation function:  $F(S, \text{"End-End RTP Key Change } \langle N \rangle")$  where  $N$  is a counter incremented whenever a new set of Real Time Protocol keys is re-derived for the same media stream session;  $F()$  is a one-way pseudo-random function used for the purpose of key derivation;  $S$  is a shared secret - a random value shared between the two endpoints and is known only to those two endpoints or a trusted server, and "End-End RTP Key Change  $\langle N \rangle$ " is a label that is used as a parameter to the key derivation function  $F()$ ,  $\langle N \rangle$  stands for an ASCII representation of a decimal number, representing a counter. Similar algorithm in the claimed invention of  $f$  as a function of a secret key and a parameter can be found in cryptography textbook known in the art. (See also **Dent**, column 15, lines 20-50).

**Claim 16** is similar to the rejected **claim 15**, except for adding a synchronization source identifier, which is known in the art as found in US patents 6,275,471 and 6,122,665. **Long et al.** also uses a key identifier that meets the recitation of synchronization source identifier, for example (see **Long et al**, column 3, lines 5-23). Therefore, **claim 16** is rejected on the same rationale as the rejection as the rejection of **claim 15**.

As per **claim 19**, claim 19 recites similar limitations as claim 1 except for using a means plus function. **Long et al** substantially discloses a system for securely transmitting voice packets during a communication session from a local location to a remote location over an Internet protocol network; the system comprising: *a local key stream generator* (key generator 80, fig. 2) that means the recitation of *a means for generating a first key stream at the local location*; an

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encryptor equipment that means the recitation of *a means for encrypting the voice packets using at least a portion of the first key stream to form encrypted voice packets* (see column 2, lines 4-6; column 2, lines 16-21 and fig.2; see also column 4, lines 53-56); *a means forwarding voice packets encrypted with the second Real Time Protocol key stream to the remote location* (see column 3, lines 19-24 and column 4, lines 47-49); *a means for generating the first key stream at the remote location for encrypting the voice packets* (key generator 80 in equipment 20, fig. 2), and decryptor equipment is operable to decrypt the data using key generated (see column 2, lines 6-8; column 2, lines 16-21 and fig. 2; see also column 4, lines 53-56) that meets the recitation of *a means for decrypting the encrypted voice packets using the first key stream*. **Long et al** discloses a rekeying process wherein both key generators generate a second key when equipment 10 performs a switchover during the communication session and both equipments 10 and 20 use the second key stream (see column 2, lines 47-63 and column 4, lines 12-23) that meets the recitation of *wherein both means for generating are capable of generating a second key stream when a component used to transmit the Real Time Protocol voice packets changes during the communication session*, **Long et al** also discloses the voice packets having a clock counter to synchronize cryptographic operations between encryption equipments 10 and 20 (column 3, lines 19-23) that meets the recitation of *wherein the voice packets having a timestamp as a synchronization source operable to synchronize cryptographic operations between said local and remote locations*.

**As per claim 20**, the references as combined above disclose the limitation of wherein the second key stream is generated when the system switches from a first to a second coder/decoder

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for compression/decompression of the voice packets, for example (see **Long et al**, (see column 4, lines 5-35; column 2, lines 47-63).

**Claims 21 and 22** are similar to the rejected **claims 11 and 12**. Therefore, they are rejected on the same rationale as the rejection of **claims 11 and 12** respectively.

**As per claim 23**, the references as combined above disclose the limitation of further comprising a means for synchronizing the voice packets, for example (see **Dent**, column 12, lines 23-51).

4. **Claims 4 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication US 5,940,508 to **Long et al** in view of US Patent 5,081,679 to **Dent** as applied to claim 1 above and further in view of US Patent Publication US 2002/0031126 to **Crichton et al** and Non-Patent Literature "RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals", May 2000; **RFC 2833**.

**As per claims 4 and 5**, **Long et al** substantially teaches forwarding/receiving encrypted packets from a local to a remote end, for example (see column 2, lines 4-8). Although **Long et al** is silent about a gateway controller, which is well known in the art of Internet Protocol network for connecting different protocol networks, if it is interpreted as software, the disclosure of **Long et al** meets the claimed limitation. **Crichton et al.** in an analogous art teaches a system for bit synchronous network communications over packet networks including Internet protocol

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network using gateways in an end-to-end communication path to perform analog to digital conversion and to communicate with packet network in a manner known in the art, for example (see page 5, paragraphs 0042 and 0047; see also background). The use of gateway is also explicitly cited in RFC 2833 for forwarding encrypted data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method as combined above to provide a gateway controller as taught by **Crichton et al** or in RFC 2833 (page 1) for forwarding and receiving encrypted packets through an Internet protocol to perform analog to digital conversion and to communicate with packet network in a manner known in the art. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Crichton et al.** so as to perform analog to digital conversion and to communicate with packet network in a manner known in the art.

5. **Claims 17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,940,508 to **Long et al** in view of US Patent 5,081,679 to **Dent** in view of US Patent Publication US 2002/0031126 to **Crichton et al.**

As per claim 17, **Long et al** substantially discloses a method comprising *generating a first Real Time Protocol key stream for encrypting the voice packets* (see column 4, lines 53-56), *forwarding encrypted voice packets to the remote location* (see column 2, lines 4-8; column 2, lines 16-21 and fig.2; see also column 4, lines 53-56). **Long et al** discloses a rekeying process wherein the key generator in equipment 10 generates a second key for encrypting the voice

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packets in response to reach a switchover value which causes a key update for the same media stream during a communication session or in response to any loss of data synchronization or need to provide data re-synchronization (see column 4, lines 5-35; column 2, lines 47-56; and column 2, line 63 through column 3, line 5) that meets the recitation of *generating a second Real Time Protocol key stream for encrypting the voice packets in response to a collision detection* **Long et al** also discloses *wherein the multimedia terminal adapters have the same source identifier* (see column 3, lines 24-29); **Long et al** further discloses *forwarding voice packets encrypted with the second Real Time Protocol key stream to the remote location* (see column 3, lines 19-24 and column 4, lines 47-49); **Long et al** also discloses the voice packets having a clock counter to synchronize cryptographic operations between encryption equipments 10 and 20 (column 3, lines 19-23) that meets the recitation of *wherein the voice packets having a timestamp as a synchronization source operable to synchronize cryptographic operations between said local and remote locations*. **Long et al** is silent about the data being voice data. It is apparent one of ordinary skill in the art that the invention may be applied to any type of data communication as known in the art including radio communication using voice packets. **Dent** in an analogous art also discloses synchronization using real-time clock and counters operable to synchronize cryptographic operations between a transmitter and a receiver in cellular radio system using voice packets (see column 12, lines 23-51). The equipment may be used for secure communication over digital channel for converting a voice signal into digital signal (see column 8, lines 54-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system of **Long et al** into cellular radio



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communications so as to securely transmit voice packets using synchronization technique and convert voice packet to digital data stream and vice versa as suggested by **Dent** above.

Although the term "gateway" is not explicitly cited in **Long et al**, it could be interpreted as a software, which meets the claimed limitation. In addition, Examiner takes official notice that gateway is notoriously well known in network communication for forwarding data and performing network protocol conversion. The use of gateway is explicitly cited in Crichton and in RFC 2833 for forwarding encrypted data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a gateway for receiving and forwarding data because if it is implemented as a hardware, it would allow control of traffic before the data actually reaches the equipments 10 and 20 and would provide load balancing.

**Claim 18** is similar to the rejected **claim 15**, except for adding a synchronization source identifier, which is known in the art as found in US patents 6,2754,71 and 6,122,665. **Long et al.** also uses a key identifier that meets the recitation of synchronization source identifier, for example (see **Long et al**, column 3, lines 5-23).

### ***Conclusion***


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art discloses many of the claimed features with respect to changing keys when codec changes in order to synchronize encrypted data packets between a transmitter and a receiver (see PTO form 892).

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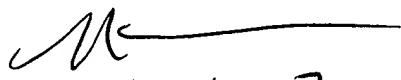
6.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Carl Colin  
Patent Examiner  
February 9, 2007

NASSER MOAZZAMI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

  
2,111,07